

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

[0002] In order to reduce the rolling resistance of the tire, a greater part of carbon black compounded in a tread rubber tends to be positively replaced with silica having a low ~~hysteresis~~ hysteresis characteristic.

[0022] <7> A method of producing a tire as described in any one of the items <1> to <6>, which comprises winding a thin high-conductive uncured rubber sheet on an outer periphery of a rotating, displacing tire raw member one [[times]] time to form an uncured electrically conductive band.

[0025] According to the item <7>, the uncured electrically conductive band is formed by winding a thin high-conductive uncured rubber sheet on an outer periphery of a rotating displacing tire raw member one [[times]] time, so that the problems of the above proposals can be solved. Also, the thickness of the electrically conductive band in the widthwise direction can be optimized by adjusting the thickness of the sheet to be wound. Furthermore, the width of the sheet to be wound is adjusted to form the electrically conductive band exceeding the side face of the tread rubber and widely exposing on the top face and bottom face of the tread layer, whereby the electric continuity between the layers can be ensured.

[0028] <9> A method according to the item <8>, wherein an uncured first tread rubber portion is formed on the outer periphery of the rotating, displacing tire raw member by circumferentially winding a continuous low-conductive uncured rubber ribbon plural times, and then an uncured electrically conductive band is formed by winding a high-conductive uncured rubber sheet on a widthwise region inclusive of a side face of the uncured first tread rubber portion one ~~[[times]]~~ time, and thereafter uncured second tread rubber portion is formed on outer peripheries of the rotating, displacing electrically conductive band and tire raw member by circumferentially winding a continuous low-conductive uncured rubber ribbon plural times.

[0032] FIG. 1 is a ~~meridional~~ meridional section view illustrating a tread portion of a tire in an embodiment of the invention;

FIG. 2 is a section view illustrating a detail of a portion “d” in FIG. 1;

FIG. 3 is a ~~schematically~~ schematic section view of a green tire on the way of the formation explaining a method of forming a tread layer;

FIG. 4 is a ~~schematically~~ schematic section view explaining step followed by FIG. 3;

FIG. 5 is a schematic view showing a method of producing an uncured tread rubber; and

FIG. 6 is a schematic view showing a method of producing an uncured electrically conductive band.

[0033] An embodiment of the invention will be described with reference to FIGS. 1-6. FIG. 1 is a ~~meridional~~ meridional section view showing a tread portion of a tire according to an embodiment of the invention, and FIG. 2 is a section view showing a detail of a portion “d” in FIG. 1. The tire 1 comprises a belt 6, a tread under cushion 5 arranged on an outer periphery 9 of the belt 6 and sidewall portions 7 disposed on both sides thereof in the widthwise direction, in which a base tread layer 3 and a cap tread layer 4 disposed outside thereof are arranged outward in the radial direction thereof as a tread layer constituting a tread 2. The base tread layer 3 comprises a first tread rubber portion 3a and a second tread rubber portion 3c having a low electric conduction, and an electrically conductive band 3b having a high electric conduction and arranged in a middle portion of the tread rubber in a widthwise direction of the tire, in which each of the first and second tread rubber portions 3a, 3c is made of a low-conductive continuous rubber ribbon 13 circumferentially wound plural times, and the electrically conductive band 3b is made of a high-conductive thin annular rubber sheet.

[0037] The low-conductive continuous rubber ribbon 13 constituting the tread rubber has a width of 5-30 mm and a thickness of about 0.3-3.0 mm, while the high-conductive thin annular rubber sheet constituting the electrically conductive band 3b, 4b has a volume resistance at 25°C of not more than $10^6 \Omega \cdot \text{cm}$ and ~~is preferable to have~~ preferably has a thickness of 0.3-2.0 mm.

[0038] [[Then]] Next, the production method of the tire will be described. The tire 1 shown in FIG. 1 can be obtained by vulcanizing an uncured green tire. The method of forming the uncured tread layer in the green tire is explained with reference to FIGS. 3-6. FIGS. 3 and 4 are ~~schematically~~ schematic section views of the green tire explaining the formation of the tread layer along the formation process, [[and]] FIG. 5 is a schematic view showing the method of forming the uncured tread rubber, and FIG. 6 is a schematic view showing the method of forming the uncured electrically conductive band.

[0040] Then, as shown in FIG. 3(b), the uncured electrically conductive band 23b is formed on the outer periphery of the tire raw member over a widthwise region ranging from a part of the top face 28a of the uncured first tread rubber portion 23a through the side face 26a of the uncured first tread rubber portion 23a to the outer peripheral face 27a of the tire raw member 21 connecting to the side face 26a. As shown in FIG. 6, the uncured electrically conductive band 26b is formed by winding an elongate thin high-conductive uncured rubber sheet 16 guided through guide rolls R5 on the outer peripheral faces of the uncured first tread rubber portion 23a and the tire raw member 21 one [[times] time]. In this case, since the outer peripheral surface comprised of the uncured first tread rubber portion 23a and the tire raw member 21 is not flat, in order to attach the uncured rubber sheet 16 onto the outer peripheral surface of the tire raw member with no space, it is preferable to push the uncured rubber sheet 16 by using a push roll R2 pushing onto the top face 28a, a push roll R3 pushing onto the side face 26a and a push roll R4 pushing onto the outer peripheral surface 27a of the tire raw member 21.

[0041] After the formation of the uncured electrically conductive band 23b, the uncured second tread rubber portion 23c is formed by circumferentially winding the uncured continuous rubber ribbon 15 plural times as shown in FIG. 3(c). The uncured base tread layer 23 is completed through the aforementioned steps. Similarly, as shown in FIG. 4(a), the uncured first tread rubber portion 24a of the cap tread layer 24 is formed on the periphery of a tire raw member 21A consisting of the tire raw member 21 and the uncured base tread layer 23 by circumferentially winding the uncured continuous rubber ribbon 15 plural times, and then the uncured electrically conductive band 24b is formed by winding the thin high-conductive uncured rubber sheet 16 one ~~[[times]]~~ time as shown in FIG. 4(b), and finally the uncured second tread rubber portion 24c is formed by circumferentially winding the uncured continuous rubber ribbon 15 plural times as shown FIG. 4(c). In this case, it is important that the uncured electrically conductive band 24b in the uncured cap tread layer 24 is contacted with the uncured electrically conductive band 23b in the uncured base tread layer 23 over the full periphery to ensure the electric continuity.